

6-month follow up

Very long phase

Conclusion: Serial OCT follow-up revealed delayed tissue coverage onto both jailed and non-jailed strut and resolution of thrombus attachment, suggesting long-term safety of SES implantation to bifurcation lesion.

TCT-303

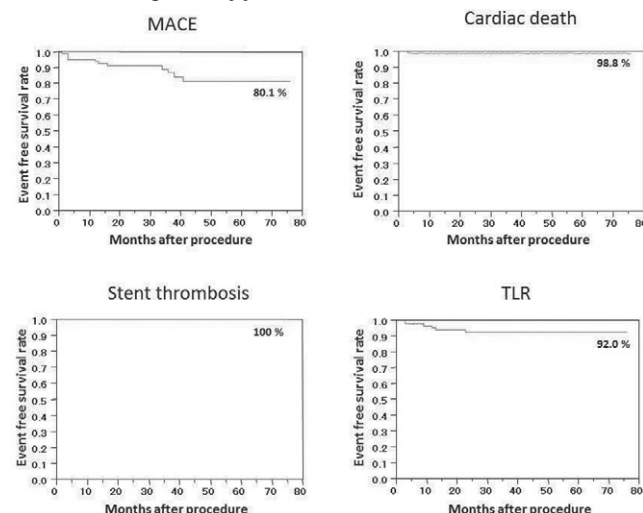
Favorable Long-Term Clinical Outcomes Of Intravascular Ultrasound-Guided Provisional Single Stent Strategy for Feasible Unprotected Left Main Trunk Distal Bifurcation Lesions

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Background: Though drug-eluting stents have dramatically improved the clinical outcomes, percutaneous intervention for left main trunk (LMT) distal bifurcation lesions is still challenging because of high rate of target lesion revascularization (TLR), stent thrombosis (ST) and mortality. Recently, superiority of provisional single-stent strategy for bifurcation lesions has been reported, however, long-term efficacy of this approach for LMT distal bifurcation is unclear.

Methods: Eighty four consecutive patients underwent LMT distal bifurcation stenting by scheduled provisional single-stent strategy in a single center. Sirolimus-eluting stents were deployed in all the cases. PCI were avoided whenever possible if the lesion had inappropriate plaque distribution for this strategy (mainly involving complex LCx ostial disease). In all the cases, intravascular ultrasound guided procedure were performed. Major adverse cardiac events (MACE), TLR, cardiac death, and ST were evaluated during the follow-up period (mean 35 months).

Results: In sixty one patients (72%) final kissing balloon technique was performed, and three (3.6%) received additional stenting (all provisional T stenting). Prevalence of 1 year, 2 years and 3 years MACE were 6.1%, 8.9% and 13.6%, respectively. TLR and Cardiac death occurred at 3 years were 8.0% and 1.2%, respectively. There were no ST events during follow-up period.



Conclusion: Even though LMT distal bifurcation disease, provisional single stent strategy for feasible lesions showed favorable long-term clinical outcomes.

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True bifurcation: a Special Subeset?

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Background: Coronary bifurcation percutaneous treatment represents a special coronary artery disease subset. Various techniques are been used treating these lesions, but few data are available regarding "true" bifurcation lesions (Medina 1,1,1).

Methods: We evaluated major adverse cardiovascular events (MACE) trend in a nation-wide retrospective registry of patients that underwent coronary bifurcation percutaneous treatment, comparing provisional stenting technique versus both branches PCI.

Results: We enrolled 2447 patients, with a mean follow up of 32 months (± 16). 1271 were assigned to provisional group (PG, 52% of cases) and both branches PCI (BB). Mean age was 64 years ± 12 ($p=0.7$), LVEF 53% ($p=0.4$), diabetes was present in 38% and 35% ($p=0.4$), chronic kidney disease in 9.7% ($p=0.6$). Multivessel disease interested 39% and 36% ($p=0.3$) of patients. 4.6% of PCI were performed due bifurcation restenosis in PG instead 7.6% in BB group ($p=0.002$). 17% of PG patients underwent PCI due acute coronary syndrome in front of 11% of BB patients ($p<0.001$). Double antiplatelet therapy duration was significantly shorter in PG (8.5 months vs 11, $p<0.001$) and DES usage was less represented (37% vs 43%, $p<0.001$). Stent thrombosis was equally represented in the two groups (1.5% vs 2.8%, $p=0.3$). At univariate analysis, PG is related to better survival free from MACE ($p<0.002$) and similar overall survival ($p=0.8$). At Cox regression, DES usage is independently related to greater free from mace survival (95% CI HR 0.6-0.9, $p=0.04$). On other hand, restenosis as indication for PCI is a MACE predictor (95% CI HR 1.6-2.8, $p<0.001$). In this setting, no differences are detected between provisional stenting and both branches PCI.

Conclusion: Despite the complex lesion subset of true bifurcations, single stent use (provisional approach) is related to better results in term of TLR and MACE, with similar overall survival at middle term follow up, even after double antiplatelet per protocol discontinuation.

TCT-305

Left Main Percutaneous Coronary Intervention in Spain. The National Registry RENACIMIENTO

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Background: Left main percutaneous coronary intervention has increased in Spain. However, there is limited data about the outcome of these patients.

Methods: Multicentered observational, prospective registry, that included all consecutive patients with severe left main coronary artery (LMCA) disease treated percutaneously at 30 centers. We describe patient and procedure characteristics and follow-up at 6 and 12 months.

Results: Between 2007 and 2008, 782 patients were enrolled. 74.6% were men, mean age was 70.8 ± 11.1 years, 41.9% were diabetic. Main indications for PCI were unstable angina/NSTEMI in 49.8% and STEMI in 11.3%. A 7% had cardiogenic shock. 54.5% were distal LMCA lesions, and 46.3% had both branch ostia involvement. Mean stenosis was $74.2 \pm 15.4\%$, being calcified lesions 50.3%. IVUS was used in 24.8%. 86% was treated with a single stent approach, 43.4% limited to LM and 41.5% extending to the LAD. When a 2-stent-technique was used, the crush stenting technique was the preferred. DES was used in 79.9%. The success rate was 96.4%. In-hospital mortality was 2.3%, excluding patients with cardiogenic shock and STEMI at presentation. Follow-up at 6 months: 13% patients had angina or ischemia. At 12 months 15.1% patients had to be admitted to hospital, mainly due to angina or myocardial infarction. Clinical restenosis rate was 2.5% confined to LM, 17.9% in the ostium of the circumflex and 13.5% in the ostium of the LAD. MACE was 27.2% (including those patients with cardiogenic shock and myocardial infarction at baseline). Multivariate logistic regression analysis showed as independent risk factors for new revascularization a technique with more than one stent implanted, and left circumflex ostium involvement.

Conclusion: PCI in LMCA in Spain is performed mainly in complex lesions, with a very low mortality in patients without cardiogenic shock. A single stent approach is the preferred technique. Among patients with distal LMCA lesions, left circumflex ostium involvement and a technique that used more than one stent were associated with a higher rate of repeat revascularization.